

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

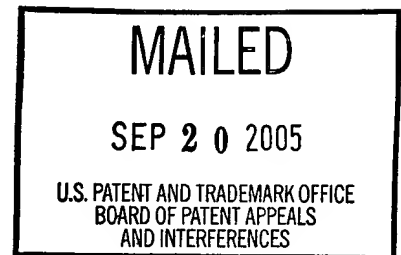
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LIUYANG YANG

Appeal No. 2005-2006
Application No. 09/116,147

ON BRIEF



Before BARRETT, RUGGIERO, and DIXON, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is decision on the appeal from the final rejection of claims 1-25, which are all of the claims pending in the present application.

The claimed invention relates to the encoding of video image data using at least first and second encoding passes, with each of the encoding passes including executable steps and executable first-order sub-steps. A systematic review of the steps and sub-steps is performed to identify which sub-steps are necessary and

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which are unnecessary to the execution of the encoding passes. Only the identified necessary sub-steps are executed during the encoding passes, thereby, according to Appellant (specification, page 10), reducing the amount of processor computation to perform a given number of encoding passes.

Claim 1 is illustrative of the invention and reads as follows:

1. In a system for encoding a frame of video image data with at least first and second encoding passes of said video image data, where the second encoding pass on said frame of video data is performed after the first encoding pass is performed on said frame of video data and each encoding pass includes a number of executable steps and at least one of said executable steps includes a number of executable first order sub-steps, a method for encoding video image data comprising:

(a) identifying first order sub-steps in at least one of said first and second encoding passes as being necessary or unnecessary for execution of said encoding passes.

(b) executing said necessary sub-steps during said first and second encoding passes; and

(c) excluding at least one sub-step from execution during an encoding pass for which that sub-step is necessary.

The Examiner relies on the following prior art:

Puri et al. (Puri)	6,148,026	Nov. 14, 2000
		(filed Dec. 29, 1997)

Claims 1-25, all of the appealed claims, stand finally rejected under 35 U.S.C. § 102(e) as being anticipated by Puri.

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Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Briefs¹ and Answer for the respective details.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner, and the evidence of anticipation relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellant's arguments set forth in the Briefs along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the Puri reference does not fully meet the invention as set forth in claims 1-25. Accordingly, we reverse.

At the outset, we note that anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of

¹ The Appeal Brief was filed March 29, 2004. In response to the Examiner's Answer mailed May 5, 2004, a Reply Brief was filed July 12, 2004, which was acknowledged and entered by the Examiner as indicated in the communication dated November 5, 2004.

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performing the recited functional limitations. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore & Assocs. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

With respect to the appealed independent claims 1, 7, 13, and 20, the Examiner attempts to read the various limitations on the disclosure of Puri. In particular, the Examiner points to the illustrations in Figures 1C and 2A of Puri along with the accompanying description at column 4, line 37 through column 6, line 52 of Puri.

Appellant's arguments in response assert a failure of Puri to disclose every limitation in independent claims 1, 7, 13, and 20 as is required to support a rejection based on anticipation. Appellant's assertions (Brief, pages 4 and 5; Reply Brief, pages 2 and 3) focus on the contention that, in contrast to the claimed invention, Puri does not disclose multiple encoding passes of video data in which unnecessary sub-steps of the encoding process for an encoding pass are excluded.

After reviewing the Puri reference in light of the arguments of record, we are in general agreement with Appellant's position as expressed in the Briefs. Although the Examiner has asserted

(Answer, page 3) that the described operation of Puri at column 5, lines 29-35 in which a recoding of video data takes place to reduce the number of mesh nodes produced during an initial encoding pass satisfies the claimed requirements, we do not find this persuasive. Although this disclosed operation of Puri undoubtedly produces less mesh node data on a recoding pass, there is no indication from the Examiner, and we find none in Puri, as to what encoding processing steps or sub-steps might be excluded on the recoding pass. We agree with Appellant (Brief, page 5; Reply Brief, page 2) that, at best, the recoding operation in Puri may involve a change of parameters or variables, not an exclusion of processing sub-steps as claimed.


We also agree with Appellant that, contrary to the Examiner's assertion, the embodiment disclosed by Puri (Figure 2A, column 6, lines 33-35) in which the mesh node coding process is disabled does not satisfy the claim language. Each of the appealed independent claims 1, 7, 13, and 20 requires a second encoding pass to be performed after a first encoding pass. As pointed out by Appellant (Reply Brief, page 3), the mesh node disabling described by Puri takes place before an initial pass, upon a determination that mesh node coding is not needed, and no second, i.e., recoding, pass takes place.

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In view of the above discussion, since all of the claim limitations are not present in the disclosure of Puri, we do not sustain the Examiner's 35 U.S.C. § 102(e) rejection of independent claims 1, 7, 13, and 20, nor of claims 2-6, 8-12, 14-19, and 21-25 dependent thereon. Therefore, the decision of the Examiner rejecting claims 1-25 is reversed.

REVERSED

Lee E. Barrett
LEE E. BARRETT
Administrative Patent Judge


JOSEPH F. RUGGIERO
Administrative Patent Judge

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JOSEPH L. DIXON
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